

IN THE CLAIMS

1 1. (Currently amended) A random number generator, comprising an electrical circuit
2 that in response to an applied electrical signal, initially has an unstable state and settles into a
3 stable state ~~which it settles into~~ after a random period of time; a counter that determines the time
4 that it takes for the electrical circuit to settle into the stable state; and a generator that generates a
5 random number using the random period of time ~~settle time~~ as the a random seed.

1 2. (Currently amended) The generator of Claim 1, wherein the electrical circuit
2 responds to said electrical signal when initially non-operating to cause said circuit to begin
3 operation ~~starts in the unstable state when power is applied to the electrical circuit.~~

1 3. (Currently amended) The generator of Claim 2 4, wherein the electrical signal is
2 applied ~~circuit is forced into the unstable state~~ during the operation of the electrical circuit ~~in~~
3 ~~order to generate a new random seed.~~

1 4. (Original) The generator of Claim 2, wherein the electrical circuit comprises a
2 phase locked loop.

1 5. (Currently amended) The generator of Claim 4, wherein the counter further
2 comprises a counter that counts a ~~the~~ number of meta-stable clock ticks of the phase locked loop
3 during the ~~settle~~ random period of time ~~of the phase locked loop~~ and wherein the random seed

4 comprises the number of meta-stable clock ticks of the phase locked loop during the settle
5 random period of time.

1 6. (Currently amended) A random number generation method, comprising:
2 providing an electrical circuit that in response to an applied electrical signal, initially has
3 an unstable state and settles into a stable state ~~which it settles into~~ after a random period of time;
4 counting the time that it takes for the electrical circuit to settle into the stable state; and
5 generating a random seed based on the settle random period of time of the electrical
6 circuit.

1 7. (Currently amended) The method of Claim 6 further comprising applying said
2 electrical signal power to the electrical circuit while ~~so that the electrical circuit starts in the~~
3 ~~unstable state when power is applied to the electrical circuit~~ is operating.

1 8. (Currently amended) The method of Claim 6 further comprising applying said
2 electrical signal to the electrical circuit while said electrical circuit is operating ~~causing the~~
3 ~~electrical circuit to be placed into the unstable state during the operation of the electrical circuit~~
4 in order to generate a new random seed.

1 9. (Currently amended) A random seed generator, comprising:
2 an electrical circuit that in response to an applied electrical signal intially has an unstable
3 state and settles into a stable state ~~which it settles into~~ after a random period of time; and

4 a counter that determines the time that it takes for the electrical circuit to settle into the
5 stable state wherein data corresponding to the settle random period of time is used by said
6 generator as corresponds to a random seed for generating a random number.

1 10. (Currently amended) The generator of Claim 9, wherein the electrical circuit is
2 non-operating prior to application of said signal ~~starts in the unstable state when power is applied~~
3 ~~to the electrical circuit.~~

1 11. (Currently amended) The generator of Claim 9, wherein the electrical signal is
2 applied ~~circuit is forced into the unstable state~~ during the operation of the electrical circuit in
3 order to generate a new random seed.

1 12. (Original) The generator of Claim 10, wherein the electrical circuit comprises a
2 phase locked loop.

1 13. (Currently amended) The generator of Claim 12, wherein the counter further
2 comprises a counter that counts ~~the~~ a number of meta-stable clock ticks of the phase locked loop
3 during the settle random period of time ~~of the phase locked loop~~ and wherein the random seed
4 comprises the number of meta-stable clock ticks of the phase locked loop during the settle
5 random period of time.

1 14. (Currently amended) A random seed generation method, comprising:

2 providing an electrical circuit that in response to an applied electrical signal, initially has
3 an unstable state and settles into a stable state ~~which it settles into~~ after a random period of time;
4 and
5 counting the random time that it takes for the electrical circuit to settle into the stable
6 state wherein data corresponding to the settle random period of time ~~corresponds to~~ is used by
7 said generator as a random seed for generating a random number.

1 15. (Currently amended) The method of Claim 14 further comprising applying said
2 electrical signal ~~power~~ to the electrical circuit while said electrical current is not operating to put
3 ~~the electrical circuit into the unstable state.~~

1 16. (Currently amended) The method of Claim 14 further comprising applying said
2 electrical signal to ~~causing~~ the electrical circuit when said electrical circuit is operating to cause
3 and electrical circuit to enter into an ~~the~~ unstable state during the operation of the electrical
4 circuit in order to generate a new random seed.

1 17. (Currently amended) A computer system that generates a random number,
2 comprising:
3 a phase locked loop circuit that upon application of an electrical signal enters into ~~has~~ an
4 unstable state and after a random period of time enters into a stable state ~~that it enters after some~~
5 ~~random period of time;~~

6 a counter for determining the random period of time and wherein said computer system
7 uses data corresponding to said random period of time as for the phase locked loop to settle into
8 ~~the stable state, the settle time corresponding to~~ a random seed; and
9 a generator for applying the random seed to a random number generator in order to
10 generate a random number.

1 18. (Currently amended) The computer system of Claim 17, wherein the counter
2 further comprises a counter that counts ~~the~~ a number of meta-stable clock ticks of the phase
3 locked loop during the random period of ~~settle~~ time of the phase locked loop and wherein the
4 random seed comprises the number of meta-stable clock ticks of the phase locked loop during
5 the ~~settle~~ random period of time.